PESTICIDE EDUCATIONAL RESOURCES COLLABORATIVE

4th Quarter Report: October 1, 2019 – December 31, 2019 Annual Report: January 1, 2019 – December 31, 2019

Fourth Operational Year: 1/01/19 - 12/31/19

Cooperative Agreement # X8-83616301 University of California Davis Extension 1333 Research Park Drive Davis, CA 95618 530-757-8603 pesticideresources.org



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PERC's Goal and Objective

The objective of the Pesticide Educational Resources Collaborative (PERC) is to implement the development, revision, or update of pesticide safety materials and resources that prevent and reduce pesticide risks to humans, communities, and ecosystems through education and outreach targeted toward agricultural workers, pesticide applicators, and others, through partners and stakeholders. This is complementary of the Environmental Protection Agency's 2018-2022 Strategic Plan, Goal 1 – Core Mission, Objective 1.4: Ensure Safety of Chemicals in the Marketplace. Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), to ensure new and existing chemicals and pesticides are reviewed for their potential risks to human health and the environment and actions are taken when necessary.

PERC is a cooperative agreement (#X8-83616301) between the U.S. Environmental Protection Agency's Office of Pesticide Programs and University of California Davis Extension, in collaboration with Oregon State University.

Submitted to:

U.S. Environmental Protection Agency
Office of Pesticide Programs

Submitted on January 31, 2020

Suzanne Forsyth
PERC Administrator and Co-PI

Quarter 4 Program Highlights and Summary

On October 8-10, 2019 Suzanne Forsyth attended and facilitated the Tribal Pesticide Program Council meeting hosted by the Yakama Nation in Toppenish, WA. Kaci Buhl attended as a guest speaker on risk communication. Suzanne and Kaci took this opportunity to promote communication and collaboration of both PERC materials and the PERC website between TPPC, PERC, SFRIG, and NPIC.

PERC held its Annual In-person Advisory Board (AB) meeting St. Louis, Missouri on November 5-6, 2019. All AB members were present as well as Matt Lloyd, PERC's new EPA Project Officer, and Lacy Ridenour from EPA Region 7. The group discussed and prioritized the project ideas for 2020 submitted by many stakeholders. PERC will move forward with a portion of these projects in 2020. A date was also set for the 2020 Annual In-person Advisory Board meeting which will take place November 2-5, 2020. Location to be determined.

In Quarter 4, PERC completed seven new resources (links are provided):

- Collaborated with NPSEC on their conversation of the Seed Treatment Manual into an E-book format and will be available through NPSEC in the near future (link pending)
- Expanded WPS CAL (Spanish Resources for Workers and Handlers)
- WPS Respirator Resources
- Summary about WPS Ventilation Criteria
- Resources for Organic Growers
- WPS Contacts in Your State
- WPS Inspector Resource Library

PERC's publications are available on the <u>PERC website</u> and for print through the National Pesticide Safety Education Center (<u>NPSEC</u>).

PERC's major activities for Project Year 2020 will be informed and promoted by a diverse Advisory Board representing key groups of stakeholders from different geographic regions and sectors. The board meets on a monthly basis, every first Thursday of the month. They will represent their constituencies on needs of time-sensitive materials, participate in prioritization, review draft materials produced through the cooperative agreement, and promote finished products in their regions/sectors.

The current Advisory Board lacks representation from the Tribal, Northeastern, Southern, and Pacific Island communities. Suzanne and Kaci will work to identify suitable candidates in 2020 and invite them to apply to the board. Solicitations for new Advisory Board Members will be going out in January or early February 2020.

PERC Resources Downloaded in Quarter 4 (October through December 2019)

How to Comply Manual (in whole or parts) – English	3,383
How to Comply Manual (in whole or parts) – Spanish	176
WPS Train-the-Trainer Manual (in whole or parts) – English	2,333
WPS Train-the-Trainer Manual (in whole or parts) – Spanish	3,803
Quick Reference Guide – English	1,493
Quick Reference Guide – Spanish	301
WPS Respiratory Protection Guide - English	824
WPS Respiratory Protection Guide – Spanish	249
WPS Pesticide Handler Training PowerPoint – English	137
WPS Train-the-Trainer PowerPoint – English	203
WPS Train-the-Trainer PowerPoint – Spanish	70
WPS Pesticide Handler Training Video – English	81
WPS Ag Worker Training Video – English	132
WPS Ag Worker Training PowerPoint – English	247
WPS Pesticide Handler Training Video – Spanish	90
WPS Pesticide Handler Training PowerPoint – Spanish	102
WPS Ag Worker Training Video – Spanish	94
WPS Ag Worker Training PowerPoint – Spanish	80
WPS Agricultural Employer Handbook – English	139
WPS Agricultural Employer Handbook – Spanish	80
Central Posting Poster – English/Spanish	388
Central Posting Poster – English	387
Central Posting Poster – Spanish	166
Central Posting Poster - Karen	9
Central Posting Poster – Traditional Chinese	8
Central Posting Poster – English/Haitian Creole	19
Central Posting Poster – Haitian Creole	14
Central Posting Poster - Russian	7
Central Posting Poster – English/Traditional Chinese	13
Central Posting Poster – English/Vietnamese	9
Central Posting Poster – English/Russian	10
Central Posting Poster - Vietnamese	12
Central Posting Poster – English/Tagalog	8
Central Posting Poster – Tagalog	4
Central Posting Poster – English/Ilocano	12
Central Posting Poster - Ilocano	12
WPS Ag Worker Training Flipchart – Spanish	0

WPS Ag Worker Training Flipchart – English/Chinese	144
WPS Ag Worker Training Flipchart – English/Russian	18
WPS Ag Worker Training Flipchart – English/Vietnamese	40
WPS Ag Worker Training Flipchart- English/Spanish	253
WPS Ag Worker Training Flipchart - English/Haitian-Creole	40
WPS Ag Worker Training Flipchart - English/Tagalog	49

PERC continues to expand the availability of resources by collaborating with NPSEC.

NPSEC Reported Sales for Quarter 4 (October through December 2019)

Central Posting Poster – English	333
Central Posting Poster - Chinese	200
Central Posting Poster - Vietnamese	77
Central Posting Poster - Ilocano	50
WPS Mega Thumb Drive	13
WPS Respiratory Protection Guide (English)	266
How to Comply Manual (English)	50
Central Posting Poster – Spanish	697
WPS Agricultural Employer Handbook (English)	210
WPS Agricultural Employer Handbook (Spanish)	100
WPS DVD – English	16
WPS DVD – Spanish	19
WPS Respiratory Protection Guide (Spanish)	0
WPS Train the Trainer – English	9
WPS Train the Trainer – Spanish	4
Central Posting Poster – Karen	0
Central Posting Poster – Haitian-Creole	1
Seed Treatment Manual	31
WPS Ag Worker Training Flipchart (Chinese)	5
WPS Ag Worker Training Flipchart (Vietnamese)	0
How to Comply Manual (Spanish)	25
WPS Train the Trainer Online Course – English	79

Objectives and Deliverables

Objective 1: To manage or implement the development, revision and updating of pesticide safety materials to advance the protection of humans, communities, and ecosystems from pesticide illness and injury.

Measure A: Engagement with Stakeholders

Anticipated or	ut-
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comes for Q4	Actual outcomes	Next quarter
Take advantage of opportunities to engage additional stakeholders.	Suzanne Forsyth and Kaci Buhl attended the Tribal Pesticide Program Council meeting hosted by the Yakama Nation on October 8-10, 2019 in Toppenish, WA. Suzanne and Kaci took this opportunity to promote communication and collaboration between TPPC, PERC, SFIREG, and NPIC.	Take advantage of opportunities to engage additional stakeholders.
Convene Advisory Board meetings in a way that builds community and comradery.	PERC communicated with the 2019 Advisory Board monthly, and the Co-Chairs facilitated introductions, information-sharing, and consideration of diverse perspectives. The November meeting was canceled due to the annual in-person AB meeting in November but resumed on December 5.	Convene Advisory Board meetings in a way that builds community and comradery.
Convene In-person Advisory Board meeting to facilitate resource needs.	The 2019 Annual In-person Advisory Board meeting was held in St. Louis, Missouri from November 5-6, 2019. All AB members were present, as well as Matt Lloyd, PERC's new EPA Project Officer, and Lacy Ridenour from EPA Region 7. The 2020 Project Ideas were discussed and prioritized by all attendees and will move forward in 2020.	

Measure B: Approval of Materials

Anticipated out-

comes for Q4	Actual outcomes	Next quarter
Evaluate all fast- track proposals within two weeks.	The Advisory Board was not presented with any fast track proposals during Quarter 4.	Evaluate all fast- track proposals within two weeks.

Measure C: Policies/Procedures

Anticipated outcomes for Q4

Actual outcomes

Next quarter

Track the number of		
new and/or updated		
PERC policies and		
procedures.		

PERC added a new policy to its collection called "Translation Requests for the WPS Central Posting Poster and other Selected Resources." Implementation of current policies continued.

PERC will be collaborating with eXtension on resolving how to address certificate name change requests from participants who have completed the Train-the-Trainer online course.

Track the number of new and/or updated PERC policies and procedures.

Measure D: Technical and Professional Experts

Anticipated out-

comes for Q4	Actual outcomes	Next quarter
Track the number and nature of SMEs and/or production professionals retained through fast-track procedures.	The Spanish project team, Carmina Hanson and Hector Nunez Contreras, continued the translation and review of the Online Train-the-Trainer course. Sandra McDonald continued her assistance with the Non-Soil Fumigation Manual and Exam Bank project. Steve Tomasko who was hired on as a writer for the Non-Soil Fumigation Manual and Exam Bank project, continues to work closely with Sandra McDonald. Janet Fults agreed to lead the creation of a new training video for non-certified applicators of Restricted Use Pesticides (RUPs). She will also be involved in the solicitation process for hiring additional Subject Matter Experts for assistance in this upcoming project.	Track the number and nature of SMEs and/or production professionals retained through fast-track procedures.
Initiate solicitations for SMEs and/or production professionals.	PERC is currently purposing a solicitation for SMEs in an upcoming video project (training non-certified applicators of RUPs) lead by Janet Fults.	

Measure E: Financial Monitoring of Contractors & Sub awardees

Anticipated out-

comes for Q4	Actual outcomes	Next quarter
Solicit quarterly and annual summaries from all sub-awards, detailing their accomplishments in Year 4.	Subaward activity for OSU is reflected in all quarterly and annual reports and is included in the 'Other' category. Financial monitoring of OSU expenditures is tracked quarterly upon receipt and review of their invoices.	Solicit quarterly and annual summaries from all sub-awards, detailing their accomplishments in Year 4.

Measure F: Materials Development

Anticipated out-

comes for Q4	Actual outcomes	Next quarter
Track the number of new and/or updated (completed) educational resources.	 In Quarter 4, PERC completed seven new resources: Collaborated with NPSEC on their conversation of the Seed Treatment Manual into an E-book format and will be available through NPSEC in the near future, posted on this landing page. Expanded WPS CAL (Spanish Resources for Workers and Handlers) WPS Respirator Resources Summary about WPS Ventilation Criteria Resources for Organic Growers WPS Contacts in Your State WPS Inspector Resource Library 	Track the number of new and/or updated (completed) educational resources.

Measure G: Planning Time-bound Materials Development

Anticipated out-

comes for Q4	Actual outcomes	Next quarter
Track the number of new and/or updated time-bound project plans.	PERC continued the translation of the online Train-the-Trainer course in Spanish. PERC continues to research the creation of industry-specific WPS videos that will utilize much of the existing footage from the first PERC video project. PERC has reached out to Janet Fults to coordinate the project and act as a SME starting in January 2020. PERC is currently in contact with University of California, Agriculture and Natural Resources (UC ANR) to assist in hiring a translator for the Hmong language WPS Flipchart translation.	Track the number of new and/or updated time-bound project plans.

Objective 2: To enhance the capabilities of partners and stakeholders to develop and implement programs/activities that prevent and reduce pesticide risks to humans, communities, and ecosystems.

Measure A: Materials for Modification & Transfer

Anticipated out- comes for Q4	Actual outcomes	Next quarter
Make modifiable versions of new PERC materials available 100% of the time when produced in Adobe InDesign or the Microsoft Office Suite.	PERC WPS materials are available in a format that can be modified by the individual to fit their particular region's needs. In accordance with PERC policy, PERC C&T materials are available in a format that can be modified but requires a signed agreement from an agency representative prohibiting the file from being shared widely.	Make modifiable versions of new PERC materials available 100% of the time when produced in Adobe InDesign or the Microsoft Office Suite.

Measure B: Inventory of Resources

Anticipated out-		
comes for Q4	Actual outcomes	Next quarter
Maintain inventory of training resources on the PERC website by adding new items as identified, removing outdated items as requested, and responding to stakeholder needs.	Ongoing management of training resources continues.	Maintain inventory of training resources on the PERC website by adding new items as identified, removing outdated items as requested, and responding to stakeholder needs.

Measure C: PERC Website

Anticipated out- comes for Q4	Actual outcomes	Next quarter
Maintain the PERC website, including the status page (quarterly).	Ongoing management of the PERC website continues.	Maintain the PERC website, including the status page (quarterly).

Measure D: Planning and Reporting

Anticipated out- comes for Q4	Actual outcomes	Next quarter
Submit quarterly reports within 30 days of the close of the quarter.	PERC submitted the third quarterly report for Year 4 within 30 days of the close of the third quarter, which ended on September 30, 2019. The quarter 3 report was submitted on October 31, 2019.	Submit quarterly reports within 30 days of the close of the quarter.
	The Q3 quarterly report included a summary of expenditures, purchases, and other fiscal activities; a side-by-side comparison of actual accomplishments vs.	

project accomplishments; proposed timelines/milestones.

Measure E: Capacity Building

Anticipated out-		
comes for Q4	Actual outcomes	Next quarter
Take advantage of efficient opportunities to engage additional stakeholders.	Suzanne Forsyth and Kaci Buhl attended the Tribal Pesticide Program Council meeting hosted by the Yakama Nation on October 8-10, 2019 in Toppenish, WA. The meeting included an overview of TPPC activities and fiscal report. Suzanne and Kaci took the opportunity to promote communication and collaboration between TPPC, PERC, SFIREG, and NPIC.	Take advantage of efficient opportunities to engage additional stakeholders.
Convene Advisory Board meetings in a way that builds community and comradery.	PERC communicated with the 2019 Advisory Board monthly, and the Co-Chairs facilitated introductions, information-sharing, and consideration of diverse perspectives.	Convene Advisory Board meetings in a way that builds community and comradery.
	The 2019 Annual In-person Advisory Board meeting was held in St. Louis, Missouri from November 5-6, 2019. All AB members were present, as well as Matt Lloyd, PERC's new EPA Project Officer, and Lacy Ridenour from EPA Region 7.	

Objective 3: To protect humans, communities and ecosystems from illness and injury caused by exposure to pesticides through education and outreach targeted toward agricultural workers, pesticide applicators, handlers, and others.

Measure A: Plain Language and Literacy Levels

Anticipated out- comes for Q4	Actual outcomes	Next quarter
100% of materials should meet goals appropriate for the identified target audience, which may include trainers (12th grade reading level), trained professionals (10th grade reading level), the general public (8th grade reading level) or other types of user groups. Occasionally, the timesensitive nature of the resource may make reading-level modifications untenable.	Subject Matter Experts (SMEs) continue to work on translating the Spanish Online Train-the-Trainer course. The Spanish Translation team is using the current course to keep in line with the appropriate reading-levels established by English versions. They are currently reviewing the course to ensure accuracy.	100% of materials should meet goals appropriate for the identified target audience, which may include trainers (12th grade reading level), trained professionals (10th grade reading level), the general public (8th grade reading level) or other types of user groups. Occasionally, the timesensitive nature of the resource may make reading-level modifications untenable.

Measure B: Formats of Materials

Anticipated outcomes for Q4

Actual outcomes

Next quarter

PERC and its project teams will evaluate the need to duplicate any materials produced, considering the potential need for indoor/outdoor settings, language needs, and/or visual representations. If one of these duplications is large in scope, it would have to be prioritized (greenlighted) by the Advisory Board, and a project plan created.

PERC materials are available in a format that can be modified by the individual to fit their particular region's needs or requirements.

PERC is currently in contact with UC ANR to assist in hiring a translator for the Hmong WPS Flipchart translation

PERC and its project teams will evaluate the need to duplicate any materials produced, considering the potential need for indoor/outdoor settings, language needs, and/or visual representations. If one of these duplications is large in scope, it would have to be prioritized (green-lighted) by the Advisory Board, and a project plan created.

Measure C: Material Format and Availability

Anticipated outcomes for Q4

In Quarter 4. PERC completed seven new resources: Summarize the items

Next quarter

completed by PERC and through PERC collaborations, identifying the method of accessibility for stakeholders.

Collaborated with NPSEC on their conversation of the Seed Treatment Manual into an E-book format and will be available through NPSEC in the near future, posted on this landing page.

Actual outcomes

- Expanded WPS CAL (Spanish Resources for Workers and Handlers)
- **WPS Respirator Resources**
- Summary about WPS Ventilation Criteria
- Resources for Organic Growers
- WPS Contacts in Your State
- **WPS Inspector Resource Library**

PERC's publications are available on the PERC website and for print through the National Pesticide Safety Education Center (NPSEC).

Summarize the items completed by PERC and through PERC collaborations, identifying the method of accessibility for stakeholders.

Measure D: Promotion of Materials

Anticipated out-	
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comes for Q4	Actual outcomes	Next quarter
Take advantage of efficient opportunities to engage additional stakeholders.	Suzanne Forsyth and Kaci Buhl attended the Tribal Pesticide Program Council meeting hosted by the Yakama Nation on October 8-10, 2019 in Toppenish, WA. Suzanne and Kaci took this opportunity to promote communication and collaboration between TPPC, PERC, SFIREG, and NPIC. On December 11, PERC Project Officer Matt Lloyd attended AgriSafe Network's webinar about respiratory protection for women working in agriculture. The primary audience was rural health care providers, educators and agribusiness safety managers. Matt provided PERC's website and the How to Comply manual as a resource.	Take advantage of efficient opportunities to engage additional stakeholders.
Advisory Board members should present and discuss PERC materials/website as they engage with their respective constituencies.	Jolene Hendrix conducted a Pesticide Recertification Training in Glendive, Montana on October 15th and 16th promoting PERC resources and the website. Betsy Danielson conducted a WPS worker training at Iowa State University on October 3rd and 15th promoting PERC resources and the website. Jane Larson distributed over 2,000 Worker Protection newsletters to crop grower groups, organic producers, and others who are part of the worker protection information listserv through the Wisconsin Department of Agriculture. Amy Sullivan attended the SFIREG meeting from December 9-10, 2019 in Crystal City, VA. where she promoted PERC's educational resource materials.	Advisory Board members should present and discuss PERC materials/website as they engage with their respective constituencies.
Use an email distribution list or lists for individuals interested in WPS materials available through PERC.	Ongoing management of PERC email lists continues. Current subscriptions to the PERC email lists include: percupdates: 309 perc-agemploy: 50 perc-handlers: 36 perc-workers: 19 perc-trainers: 103	Use an email distribution list or lists for individuals interested in WPS materials available through PERC.

Difficulties and Departures

Planning for the video of the non-certified applicators of Restricted Use Pesticides (RUP) has been delayed due to the non-availability of our preferred SME to coordinate this project, Janet Fults. Janet is a UC employee and will return to PERC projects in January 2020. We are in the process of soliciting for a video production specialist using a transparent process.

Sub-Awards, Contracts and Other Agreements

As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Dr. Craig Marcus and Kaci Buhl serve as co-Pls. Under Kaci's direction, OSU helped to create publications/documents identified through PERC needs assessments, wrote publications/documents on topics that fell within existing areas of expertise, built, housed and maintained the PERC website, and developed and maintained an inventory of existing pesticide safety materials. The total amount of this sub-award in Project Year 2019 for 1/1/19 through 12/31/19 is \$100,000. The OSU invoice for Q1 was \$30,522.57, for Q2 was \$38,718.01 and for Q3 was \$30,504. We have not yet received OSU's Q4 invoice. The total for Project Year 2019 is not expected to exceed the negotiated \$100,000 amount.

Quarterly Budget Expenditures – Project Year 2019

Table 1 - Quarter 4: October 1, 2019 - December 31, 2019

Project Year 2019	Qtr 4 Actual	Budgeted Annual	% Used of Annual
A. Personnel	\$20,773	\$105,686	19.66%
B. Fringe Benefits	\$13,577	\$48,792	27.83%
C. Travel	\$5,999	\$9,792	61.26%
D. Equipment	\$0	\$0	0%
E. Supplies	\$478	\$743	64.33%
F. Contractual	\$19,679	\$322,015	6.11%
G. Construction	\$0	\$0	0%
H. Other	\$4,479	\$65,480	6.84%
H. Other (indirect exempt)	\$33,026	\$116,239	28.41%
Total Direct Costs	\$98,012	\$668,747	14.66%
Total Modified Direct Costs (MTDC)	\$64,986	\$552,506	11.76%
Indirect Costs (based on MTDC)	\$29,626	\$276,253	10.72%
	\$127,638	\$945,000	13.51%

Table 1 reports resources used during the fourth quarter of Project Year 2019 are \$127,638 representing 13.51% of the annual budget. UCDE expects a few remaining Q4 items to post in early 2020 and will submit an amended report at that time. These additional direct expenses will be reflected in a subsequent draw-down and amended report. A summary of cumulative expenses by Quarter appears in the annual reporting on page 30.

Year 4: 2019 Program Highlights and Summary

PERC's major activities were informed and promoted by a diverse Advisory Board (AB) representing key groups of stakeholders from different geographic regions and sectors. They represented their constituencies on needs of time-sensitive materials, participated in prioritization, reviewed draft materials produced through the cooperative agreement, and promoted finished products in their regions/sectors.

Quarter 1:

In March 2019, Suzanne Forsyth attended the 2019 Association of American Pesticide Control Officials (AAPCO) Annual Conference in Alexandria, VA. She met with regional and national stakeholders and apprised them on the status of PERC projects, while seeking additional input on emerging priorities. During the 3-day meeting, PERC coordinated with NPSEC on a display table highlighting current PERC materials available for print from the PERC website or for order through NPSEC.

Using a national solicitation process, the following Advisory Board members were selected for Project Year 2019:

- 1. Craig Anderson, Michigan Farm Bureau
- 2. Lisa Blecker, University of California
- 3. Betsy Danielson, Iowa State University
- 4. Melanie Forti, Association of Farmworker Opportunity Programs
- 5. Carmina Hanson, North Carolina Department of Agriculture and Consumer Services
- 6. Jolene Hendrix, Montana Department of Agriculture
- 7. Caroline Kirby, Plunkett's Pest Control
- 8. Jane Larson, Wisconsin Department of Agriculture, Trade and Consumer Protection
- 9. Bethany Plewe, U.S. EPA Region 10
- 10. Amy Sullivan, Association of American Pesticide Control Officials
- 11. Leslie Talpasanu, California Department of Pesticide Regulation

The Year 4 Advisory Board lacked representation from the Tribal, Southern, Northeastern, and Pacific Island communities. Suzanne and Kaci will work to identify suitable candidates in 2020 and invite them to join the board.

Quarter 2:

In May 2019, Kaci Buhl and Suzanne Forsyth attended and presented at the Certification and Training PREP Course in Crystal City, Virginia. The main audience was state regulators, federal regulators, and educators focused on certifying and training professional pesticide applicators. This allowed for much collaboration and discussion of both PERC materials and the PERC website.

PERC completed four new projects in Q2 including the:

- How to Comply manual in Spanish
- Central Posting posters in Russian and Tagalog
- WPS Agricultural Worker <u>flipcharts</u> in <u>Chinese</u>, <u>Russian</u>, and <u>Vietnamese</u>
- Image Library for Pesticide Safety Education

Quarter 3:

In July 2019, Kaci Buhl spoke about the WPS and PERC resources at the annual statewide meeting of the Oregon Nut Growers. This allowed for collaboration and discussion of both PERC materials and the PERC website.

In Quarter 3, PERC completed four new projects including:

- A mega thumb drive with PERC WPS resources and materials for training available through <u>NPSEC</u>.
- Central Posting posters in Ilocano.
- An expanded suite of Spanish WPS resources for workers and handlers, adding 12 new webpages.
- A printable version of PERC's <u>Bilingual Dictionary</u>.

PERC Resources Downloaded in 2019

How to Comply Manual (in whole or parts) – English	19,041
WPS Train-the-Trainer Manual (in whole or parts) – English	11,277
WPS Train-the-Trainer Manual (in whole or parts) – Spanish	10,483
Quick Reference Guide – English	8,395
WPS Respiratory Protection Guide – English	5,358
Central Posting Poster – English/Spanish	3,230
Central Posting Poster – English	2,349
WPS Pesticide Handler Training PowerPoint – English	1,661
WPS Train-the-Trainer PowerPoint – English	1,294
Quick Reference Guide – Spanish	1,234
WPS Ag Worker Training Video – English	1,174
WPS Pesticide Handler Training Video – English	1,040
WPS Ag Worker Training PowerPoint – English	1,025
WPS Agricultural Employer Handbook – English	963
Central Posting Poster – Spanish	899
WPS Ag Worker Training Flipchart – English/Chinese	853
WPS Respiratory Protection Guide – Spanish	852
WPS Ag Worker Training Video – Spanish	777
WPS Ag Worker Training PowerPoint – Spanish	767
WPS Pesticide Handler Training Video – Spanish	739
WPS Pesticide Handler Training PowerPoint – Spanish	684
How to Comply Manual (in whole or parts) – Spanish	683
WPS Ag Worker Training Flipchart – English/Spanish	562
WPS Ag Worker Training Flipchart – Spanish	509
WPS Agricultural Employer Handbook – Spanish	443
WPS Train-the-Trainer PowerPoint – Spanish	362
Central Posting Poster – Karen	146

WPS Ag Worker Training Flipchart – English/Haitian-Creole	135
Central Posting Poster – Haitian Creole	134
Central Posting Poster – English/Haitian Creole	122
Central Posting Poster – Traditional Chinese	110
Central Posting Poster – Vietnamese	102
WPS Ag Worker Training Flipchart – English/Russian	100
WPS Ag Worker Training Flipchart – English/Tagalog	100
WPS Ag Worker Training Flipchart – English/Vietnamese	99
Central Posting Poster – Tagalog	95
Central Posting Poster – English/Traditional Chinese	91
Central Posting Poster – English/Vietnamese	88
Central Posting Poster – Russian	75
Central Posting Poster – English/Russian	69
Central Posting Poster – English/Tagalog	64
Central Posting Poster – English/Ilocano	21
Central Posting Poster – Ilocano	21

PERC's publications are available on the PERC website and for print through NPSEC.

NPSEC Reported Sales for 2019

Central Posting Poster – English	3,032
Central Posting Poster – Spanish	1,704
WPS Respiratory Protection Guide – English	1,107
WPS Agricultural Employer Handbook – English	675
How to Comply Manual – English	323
WPS Agricultural Employer Handbook – Spanish	301
WPS Respiratory Protection Guide – Spanish	232
Central Posting Poster – Chinese	200
WPS DVD – English	183
WPS DVD – Spanish	162
WPS Train the Trainer Online Course – English	79
WPS Train the Trainer – English	78
Central Posting Poster – Vietnamese	77
Seed Treatment Manual	65
WPS Train the Trainer – Spanish	60
Central Posting Poster – Ilocano	50
How to Comply Manual – Spanish	25
Central Posting Poster – Karen	24

Objectives and Deliverables

Objective 1: To manage or implement the development, revision and updating of pesticide safety materials to advance the protection of humans, communities, and ecosystems from pesticide illness and injury.

Measure A: Engagement with Stakeholders

Anticipated out-comes	Actual outcomes
Take advantage of opportunities to engage additional stakeholders.	Suzanne Forsyth attended the 2019 Association of American Pesticide Control Officials (AAPCO) Annual Conference in Alexandria, VA from March 4-6, 2019. PERC collaborated with Tom Smith of NSPEC to promote PERC materials available for print from the PERC website or for order through NPSEC.
	Suzanne Forsyth administered the Tribal Pesticide Program Council (TPPC) meeting in Alexandria from March 6-8, 2019. Suzanne presented PERC projects and resources.
	On April 2, 2019, Kaci Buhl gave presentation at the Oregon Association of Extension Agents (OAEA) in Bandon, Oregon. She promoted PERC resources and materials.
	On May 1, 2019 Kaci Buhl and Suzanne Forsyth presented at the Certification and Training (C&T) PREP Course in Crystal City, Virginia. Attendees included federal and state regulators, and educators focused on certifying and training professional pesticide applicators. This allowed for much collaboration and discussion of both PERC publications and the website.
	On July 31, 2019 Kaci Buhl spoke about the WPS and PERC resources at the annual statewide meeting of the Oregon Nut Growers. This allowed for collaboration and discussion of both PERC materials and the PERC website.
Convene Advisory Board meetings in a way that builds community and comradery.	PERC communicated with the Advisory Board monthly, and the Co- Chairs facilitated introductions, information-sharing, and consideration of diverse perspectives. In June, introductions were announced for new UCD staff member, Grace Barajas.
Convene In-person Advisory Board meeting to facilitate resource needs.	The annual In-person Advisory Board meeting will take place November 5-6, 2019 at the Sheraton Westport Chalet Hotel in St. Louis, Missouri. Matt Lloyd and Lacy Ridenour from EPA who will also be attending the meeting in November.
Attend AAPCO annual meeting, and/or other national/regional forum(s), promote PERC materials and solicit needs information.	Suzanne attended the 2019 AAPCO conference in Alexandria, VA and collaborated with NSPEC to promote PERC materials available for print from the PERC website or for order through NPSEC.

Seek a time slot and attend the PACT workshop agenda or other national forums(s) to promote PERC materials and/or solicit needs information.	In July 2019, Advisory Board members, Jolene Hendrix and Betsy Danielson (formerly Buffington) attended the North Central Region Pesticide Applicator Certification and Training (PACT) Workshop in Duluth, MN where PERC projects and promotional materials were shared.
Attend one or more regional events re: C&T needs assessment.	Suzanne Forsyth attended the 2019 AAPCO conference in March. She connected with stakeholders on current needs in pesticide education and training.
	Suzanne and Kaci will be attending the Certification & Training (C&T) PREP course in April. Sandra McDonald will also be attending as a representative of the PERC Non-Soil Fumigation project.
Join/monitor C&T working group(s) to solicit needs information.	PERC conducted a needs assessment to determine the scope of the Non-Soil Fumigation Manual and Exam Bank. These findings will be shared at the C&T PREP course in April and additional feedback will be solicited from stakeholders.
Publish a solicitation for Year 4 Advisory Board members, to be seated by March 31st	A solicitation for the Project Year 4 Advisory Board was published on January 28. Applications were scored based on qualifications, and final acceptances were sent by March 20.
Induct Year 4 Advisory Board Members; discuss state/regional needs.	The 2019 Advisory Board was selected to represent key groups of stakeholders from different geographic regions and sectors.
Charge Advisory Board members with soliciting "needs" information from their represented constituencies.	2019 Advisory Board members were selected based on qualifications and regional representation. Their knowledge and expertise range from WPS to C&T.

Measure B: Approval of Materials

Anticipated out-comes	Actual outcomes
Evaluate all fast-track proposals within two weeks.	The Advisory Board was not presented with any fast track proposals during 2019.

Measure C: Policies/Procedures

Anticipated out-comes	Actual outcomes
Track the number of new and/or updated PERC policies and procedures.	A new policy was implemented to have PERC materials translated into languages other than Spanish. PERC also worked with NPSEC to streamline customer service inquiries to be sent directly to NPSEC staff.
	Implementation of current policies continued.

Measure D: Technical and Professional Experts

Anticipated out-comes	Actual outcomes
Distribute solicitations for Year 4 Advisory Board members.	A solicitation was published on January 28 and distributed to all PERC email lists and national stakeholders, including AAPSE, AAPCO, and AFOP.
Finalize agreements with Year 4 Advisory Board members	Caroline Kirby and Amy Sullivan continued their compensated work on the Advisory Board.
	Paola Betchart was onboarded as an independent contractor, but due to health reasons had to vacate her board position.
Track the number and nature of SMEs and/or production professionals retained through fast-track procedures.	From January to June, Jennifer Weber served as coordinator of the Spanish review team for the How to Comply Manual and Spanish Online Train-the-Trainer course. The team consisted of Claudia Arrieta, Carmina Hanson, and Hector Nunez Contreras. In July, Carmina Hanson took over as coordinator for the Spanish review team.
	Sandra McDonald continued her assistance with the Non-Soil Fumigation Manual and Exam Bank. PERC also onboarded Steve Tomasko as a writer for the project.
Initiate solicitations for SMEs and/or production professionals.	In August, a call for 2020 project ideas for PERC production/partnerships was proposed to the Advisory Board. The closing date was October 14, 2019. After a project is approved by the Advisory Board, PERC uses a competitive process to select the development team.

Measure E: Financial Monitoring of Contractors & Sub awardees

Anticipated out-comes	Actual outcomes
Solicit quarterly and annual summaries from all sub-awards, detailing their accomplishments in Year Three.	Sub-awardee activity for OSU is reflected in all quarterly and annual reports and is included in the 'Other' category. Financial monitoring of OSU expenditures is tracked quarterly upon receipt and review of their invoices.

Measure F: Materials Development

Anticipated out-comes

Actual outcomes

Track the number of new and/or updated (completed) educational resources.

In 2019, PERC released the following publications:

- WPS Training Video short clips
- Bilingual Dictionary of Terms
- How to Comply manual in Spanish
- Central Posting posters in <u>Ilocano</u>, <u>Russian</u>, and <u>Tagalog</u>
- WPS Agricultural Worker <u>flipcharts</u> in <u>Chinese</u>, <u>Russian</u>, and Vietnamese
- <u>Image Library</u> for Pesticide Safety Education
- A mega thumb drive with PERC WPS resources and materials for training available through NPSEC.
- An expanded suite of Spanish WPS resources for workers and handlers, adding 12 new webpages.
- A printable version of PERC's <u>Bilingual Dictionary</u>.

PERC's publications are available on the PERC <u>website</u> and for print through the National Pesticide Safety Education Center (<u>NPSEC</u>).

Measure G: Planning Time-bound Materials Development

Anticipated out-comes

Actual outcomes

Track the number of new and/or
updated time-bound project
plans.

PERC is currently researching to have the translation of WPS worker and handler training videos into indigenous languages.

The Spanish Online Train-the-Trainer course is currently still in development by the Spanish Translation team.

PERC continues to research the creation of industry-specific WPS videos that will utilize much of the existing footage from the first PERC video project. PERC has reached out to a SME (subject matter expert) and hopes to have this SME serve as the lead for this project starting in January 2020.

PERC is working with Tom Smith from the NPSEC store to have the Seed Treatment Manual available in eBook form.

Objective 2: To enhance the capabilities of partners and stakeholders to develop and implement programs/activities that prevent and reduce pesticide risks to humans, communities, and ecosystems.

Measure A: Materials for Modification & Transfer

Anticipated out-comes

Actual outcomes

le
or

PERC WPS materials are available in a format that can be modified by the individual to fit their particular region's needs.

In accordance with PERC policy, PERC C&T materials are available in a format that can be modified but requires a signed agreement from an agency representative prohibiting the file from being shared widely.

Measure B: Inventory of Resources

Anticipated out-comes

Actual outcomes

Maintain inventory of training	(
resources on the PERC website	
by adding new items as	
identified, removing outdated	
items as requested, and	
responding to stakeholder	
needs.	

Ongoing management of training resources continues.

Measure C: PERC Website

Anticipated out-comes

Actual outcomes

Maintain the PERC website,
including the status page
(quarterly).

Ongoing management of the PERC website continues.

Measure D: Planning and Reporting

Anticipated out-comes

Actual outcomes

Submit quarterly reports within
30 days of the close of the
quarter.

This fourth quarterly and annual report for Year 4 was submitted within 30 days of the close of the quarter on January 31, 2020.

This report includes a summary of expenditures, purchases, and other fiscal activities; a side-by-side comparison of actual accomplishments vs. project accomplishments; proposed timelines/milestones.

Measure E: Capacity Building

Anticipated out-comes	Actual outcomes
Take advantage of efficient opportunities to engage additional stakeholders.	Suzanne Forsyth attended the 2019 Association of American Pesticide Control Officials (AAPCO) Annual Conference in Alexandria, VA from March 4-6, 2019. PERC collaborated with Tom Smith of NSPEC to promote PERC materials available for print from the PERC website or for order through NPSEC.
	Suzanne Forsyth administered the Tribal Pesticide Program Council (TPPC) meeting in Alexandria from March 6-8, 2019. Suzanne presented PERC projects and resources.
	On April 2, 2019, Kaci Buhl gave presentation at the Oregon Association of Extension Agents (OAEA) in Bandon, Oregon. She promoted PERC resources and materials.
	On May 1, 2019 Kaci Buhl and Suzanne Forsyth presented at the Certification and Training (C&T) PREP Course in Crystal City, Virginia. Attendees included federal and state regulators, and educators focused on certifying and training professional pesticide applicators. This allowed for much collaboration and discussion of both PERC publications and the website.
	On July 31, 2019 Kaci Buhl spoke about the WPS and PERC resources at the annual statewide meeting of the Oregon Nut Growers. This allowed for collaboration and discussion of both PERC materials and the PERC website.
Convene Advisory Board meetings in a way that builds community and comradery.	PERC communicated with the Advisory Board monthly, and the Co-Chairs facilitated introductions, information-sharing, and consideration of diverse perspectives. In June, introductions were announced for new UCD staff member, Grace Barajas.
Summarize the results of needs assessment activities.	The 2019 In-person Advisory Board meeting was held in November and convened a needs-assessment workshop to facilitate collaborative prioritization of resource needs.

Objective 3: To protect humans, communities and ecosystems from illness and injury caused by exposure to pesticides through education and outreach targeted toward agricultural workers, pesticide applicators, handlers, and others.

Measure A: Plain Language and Literacy Levels

Anticipated out-comes

Actual outcomes

100% of materials should meet goals appropriate for the identified target audience, which may include trainers (12th grade reading level), trained professionals (10th grade reading level), the general public (8th grade reading level) or other types of user groups.

Occasionally, the time-sensitive nature of the resource may make reading-level modifications

Subject Matter Experts (SMEs) reviewed the Spanish translations of the How to Comply Manual to keep in line with the appropriate reading-levels established by English versions.

Work continues on the Spanish translation process of the Online Trainthe-Trainer course. The Spanish Translation team is using the current course to keep in line with the appropriate reading-levels established by English versions. They are currently reviewing the course to ensure accuracy.

Measure B: Formats of Materials

Anticipated out-comes

untenable.

Actual outcomes

PERC and its project teams will evaluate the need to duplicate any materials produced, considering the potential need for indoor/outdoor settings, language needs, and/or visual representations. If one of these duplications is large in scope, it would have to be prioritized (green-lighted) by the Advisory Board, and a project plan created.

PERC materials are available in a format that can be modified by the individual to fit their particular region's needs or requirements.

Ricardo Davalos from the Florida Department of Agriculture requested that more PERC materials and resources are available in Haitian-Creole. PERC plans to hire appropriate and qualified translators for this upcoming translation project.

Measure C: Material Format and Availability

Anticipated out-comes

Actual outcomes

Summarize the items completed by PERC and through PERC collaborations, identifying the method of accessibility for stakeholders. In 2019, PERC released the following publications:

- WPS Training Video short clips
- Bilingual Dictionary of Terms
- How to Comply manual in Spanish
- Central Posting posters in <u>llocano</u>, <u>Russian</u>, and <u>Tagalog</u>
- WPS Agricultural Worker <u>flipcharts</u> in <u>Chinese</u>, <u>Russian</u>, and Vietnamese
- <u>Image Library</u> for Pesticide Safety Education
- A mega thumb drive with PERC WPS resources and materials for training available through NPSEC.
- An expanded suite of Spanish WPS resources for <u>workers</u> and <u>handlers</u>, adding 12 new webpages.
- A printable version of PERC's <u>Bilingual Dictionary</u>.

PERC's publications are available on the PERC <u>website</u> and for print through the National Pesticide Safety Education Center (<u>NPSEC</u>).

Measure D: Promotion of Materials

Anticipated out-comes

Actual outcomes

Take advantage of efficient opportunities to engage additional stakeholders.

Suzanne Forsyth attended the 2019 Association of American Pesticide Control Officials (AAPCO) Annual Conference in Alexandria, VA from March 4-6, 2019. PERC collaborated with Tom Smith of NSPEC to promote PERC materials available for print from the PERC website or for order through NPSEC.

Suzanne Forsyth administered the Tribal Pesticide Program Council (TPPC) meeting in Alexandria from March 6-8, 2019. Suzanne presented PERC projects and resources.

On April 2, 2019, Kaci Buhl gave presentation at the Oregon Association of Extension Agents (OAEA) in Bandon, Oregon. She promoted PERC resources and materials.

On May 1, 2019 Kaci Buhl and Suzanne Forsyth presented at the Certification and Training (C&T) PREP Course in Crystal City, Virginia. Attendees included federal and state regulators, and educators focused on certifying and training professional pesticide applicators. This allowed for much collaboration and discussion of both PERC publications and the website.

On July 31, 2019 Kaci Buhl spoke about the WPS and PERC resources at the annual statewide meeting of the Oregon Nut Growers. This allowed for collaboration and discussion of both PERC materials and the PERC website.

Advisory Board members should present and discuss PERC materials/website as they engage with their respective constituencies. Jane Larson, prior to joining the Advisory Board, promoted PERC at the Agricultural Safety Connection Educational Seminar hosted by OSHA and the Ginseng Spring Grower Meeting. At both events she distribute handout with information about PERC. Carmina Hanson, on behalf of the North Carolina Department of Agricultural and Consumer Services, assisted with 122 meetings for							
Carmina Hanson, on behalf of the North Carolina Department of	. .						
private applicators, in which PERC was shared as a resource of educational materials.	Agricultural and Consumer Services, assisted with 122 meetings for private applicators, in which PERC was shared as a resource of						
Craig Anderson promoted PERC resources and the website at 31 different trainings across the state of Michigan in 2019.							
Amy Sullivan discussed PERC's Spanish translation projects at the SFIREG meeting in Washington DC. Attendees included EPA, state regulators, registrants, and the media.	SFIREG meeting in Washington DC. Attendees included EPA, state						
Betsy Danielson (formerly Huffington) promoted the PERC website including WPS resources at the Proteus staff meeting in Des Moines, Iowa. She also gave WPS worker and handler training at 12 different events for Iowa State University employees This allowed her to use, reand discuss PERC's WPS resources and website.	fer,						
PERC resource materials to the Association of Farmworker Opportuni	Melanie Forti presented the WPS flipchart in other languages and other PERC resource materials to the Association of Farmworker Opportunity Programs (AFOP) board. She also invited her network of 252 trainers to provide any ideas for 2020 PERC projects.						
Promote PERC at the annual AAPCO meeting. Suzanne collaborated with NPSEC on a display to share current PERC materials available for print from the PERC website or for order throug NPSEC.							
Promote PERC at the PACT workshop. Advisory Board members Jolene Hendrix and Betsy Danielson shared PERC updates and promotional materials with attendees at the North Central Region PACT workshop in Duluth, MN on July 23.	· · ·						
Use an email distribution list or Ongoing management of PERC email lists continues.	Ongoing management of PERC email lists continues.						
lists for individuals interested in WPS materials available through PERC. Subscriptions to the PERC email lists include:	Subscriptions to the PERC email lists include:						
Quarter 1: Quarter 2: Quarter 3:							
percupdates: 295 percupdates: 299 percupdates: 303							
perc-agemploy: 42 perc-agemploy: 43 perc-agemploy: 46							
perc-handlers: 30 perc-handlers: 32 perc-handlers: 33 perc-workers: 20 perc-workers: 19							
perc-trainers: 90 perc-trainers: 92 perc-trainers: 96							

Difficulties and Departures

Initiated in April 2018, the translation and review of the PERC Central posting poster and AFOP Agricultural Worker training flipchart into multiple languages was much more complicated than we had thought. We had to 1) secure initial translations of the items and 2) secure qualified SME reviewers to assure technical accuracy. Despite exhaustive means to communicate with recruited reviewers, we lost contact with a few and some items had to be tabled in Quarter 1. By the end of the year we were able to accomplish all of our planned outputs.

Scoping for the translation of the PERC WPS videos in indigenous languages commenced in Spring 2019 and was much more complicated than we anticipated. Collaborators who routinely work with these underserved worker populations have advised that we not pursue Mixteco, Alto, and Bajo as they are not universally recognized by the majority of Mixteco speakers. The variances are notable down to the neighborhood level and there is no standard dialect that captures either of these needed translations. PERC is collaborating with UCD's Western Center for Agricultural Health and Safety (WCAHS) for their guidance. WCAHS is collaborating with indigenous worker groups in California under a contract with the California Department of Pesticide Regulation to create worker safety training materials for indigenous language speaking workers. These groups include the Mixteco/Indígena Community Organizing Project (MICOP) and the Binational Center for the Development of Oaxacan Indigenous Communities (CBDIO.) WCAHS is willing to share their insights on the creation of materials with PERC.

Planning for the video of the non-certified applicators of Restricted Use Pesticides (RUPs) has been delayed due to the non-availability of our preferred SME to coordinate this project, Janet Fults. Janet is a UC employee and will return to PERC projects in January 2020. We will soon solicit for a video production specialist using a transparent process.

Sub-Awards, Contracts and Other Agreements

- Quarter 1: As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Dr. Craig Marcus and Kaci Buhl serve as co-Pls. Under Kaci's direction, OSU helped to create publications/documents identified through PERC needs assessments, wrote publications/documents on topics that fell within existing areas of expertise, built, housed and maintained the PERC website, and developed and maintained an inventory of existing pesticide safety materials. The total amount of this sub-award in Project Year 2019 for 1/1/19 through 12/31/19 shall be \$100,000. OSU has not yet submitted their invoice for Q1 but will be reported in the Q2 report. The total for Project Year 2019 is not expected to exceed the negotiated \$100,000 amount.
- Quarter 2: As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Dr. Craig Marcus and Kaci Buhl serve as co-Pls. Under Kaci's direction, OSU helped to create publications/documents identified through PERC needs assessments, wrote publications/documents on topics that fell within existing areas of expertise, built, housed and maintained the PERC website, and developed and maintained an inventory of existing pesticide safety materials. The total amount of this sub-award in Project Year 2019 for 1/1/19 through 12/31/19 is \$100,000. The OSU invoice for Q1 was \$30,522.57.

The total for Project Year 2019 is not expected to exceed the negotiated \$100,000 amount.

Quarter 3:

As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Dr. Craig Marcus and Kaci Buhl serve as co-Pls. Under Kaci's direction, OSU helped to create publications/documents identified through PERC needs assessments, wrote publications/documents on topics that fell within existing areas of expertise, built, housed and maintained the PERC website, and developed and maintained an inventory of existing pesticide safety materials. The total amount of this sub-award in Project Year 2019 for 1/1/19 through 12/31/19 is \$100,000. The OSU invoice for Q1 was \$30,522.57 and for Q2 was \$38,718.01. We have not yet received OSU's Q3 invoice. The total for Project Year 2019 is not expected to exceed the negotiated \$100,000 amount.

Year 4: 2019 Annual Budget Expenditures

Year 4 2019: January 1, 2019 - December 31, 2019

	Q1	Q2	Q3	Q4	Cumulative	Budgeted Annual	Carryover from 2016 thru 2018*	Budgeted Annual, New	% Used of New Annual
Project Year 2019									
A. Personnel	\$34,988	\$37,428	\$22,599	\$20,773	\$115,788	\$105,686	\$13,000	\$118,686	97.56%
B. Benefits	\$12,561	\$15,788	\$7,106	\$13,577	\$49,032	\$48,792	\$3,000	\$51,792	94.67%
C. Travel	\$855	\$2,033	\$0	\$5,999	\$8,887	\$9,792	\$36,365	\$46,157	19.25%
D. Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
E. Program Supplies	\$388	\$1,073	\$0	\$478	\$1,940	\$743	\$1,642	\$2,385	53.25%
F. Contractual	\$27,760	\$11,762	\$27,054	\$19,679	\$86,255	\$322,015	\$587,806	\$909,821	9.48%
G. Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
H. Other H. Other (indirect exempt)	\$0 \$0	\$30,523	\$38,718	\$4,479	\$4,484	\$65,480	\$214,067	\$279,547	72.41%
Total Direct Costs	\$76,553	\$98,612	\$95,477	\$98,012	\$368,653	\$668,747	\$880,880	\$1,549,627	23.79%
Total Modified Direct Costs (MTDC)	\$76,553	\$68,090	\$56,759	\$64,986	\$266,387	\$552,506	\$701,257	1,253,763	21.25%
I. Indirect Costs	\$38,277	\$34,045	\$28,380	\$29,626	\$125,328	\$276,253	\$400,069	\$676,322	18.53%
Sub-total	\$114,829	\$132,657	\$123,857	\$127,638	\$493,981	\$945,000	\$1,280,949	\$2,225,949	22.19%
Less UCDE cost- share w/indirect	TBD	TBD	TBD	TBD	TBD				
Total Expenses:	\$114,829	\$132,657	\$123,857	\$127,638	\$493,981				

^{*}UCDE preserved the category for each all Carryover funds, with the exception of Personnel, Benefits and Other (indirect exempt). Those funds were transferred from the Contractual line balance.

Pesticide Educational Resources Collaborative

Resources used during Q1-4 of Project Year 2019 amount to \$493,981 representing 52.27% of the total annual (original) budget of \$945,000. Unexpended funds from Project Years 2016-18 were carried forward to 2019 and appear in the "Carryover from 2016 to 2018" column above. The carryover balances are \$880,880 in direct costs plus \$400,069 in indirect costs, amounting to \$1,280,949 total. This results in an amended budget for Project Year 2019 total of \$2,225,949. The \$493,981 expended in Project Year 2019 represents 22.19% of the amended amount with all carryover.

UCDE expects a few remaining items to post in early 2020 (e.g., OSU subaward invoice, travel expenses to attend the annual in-person Advisory Board meeting, others) and will submit an amended report in February. Similarly, UCDE's cost sharing commitment will be reported at the end of the project period.